

CLAIMS

1. A spacer for a liquid crystal display,
which comprises a base particle and a polymer coating
5 the surface of said base particle,
a contact angle A1 of water on the spacer, measured
at 25°C when said spacer is annealed at a temperature of an
annealing temperature T1 or higher in fabricating a liquid
crystal display for 1 hour or more and then cooled, and a
10 contact angle B of water on the spacer, measured at 25°C
without annealing the spacer, satisfying the relationship
of the following equation (1):
$$A1 - B \geq 1^\circ \quad (1).$$
- 15 2. The spacer for a liquid crystal display according
to claim 1,
wherein a contact angle A1 of water on the spacer,
measured at 25°C when said spacer is annealed at a
temperature of an annealing temperature T1 or higher in
20 fabricating a liquid crystal display for 1 hour or more and
then cooled, and a contact angle B of water on the spacer,
measured at room temperature without annealing the spacer,
satisfy the relationship of the following equation (2):
$$A1 - B \geq 8^\circ \quad (2).$$
- 25 3. A spacer for a liquid crystal display,
which comprises a base particle and a polymer which
coats the surface of said base particle,
a contact angle A2 of water on the spacer, measured
30 at 25°C when said spacer is annealed at a temperature of a
glass transition temperature T2 or higher of said polymer
and then cooled, and a contact angle B of water on the
spacer, measured at 25°C without annealing the spacer,
satisfying the relationship of the following equation (3):
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$$A2 - B \geq 1^\circ \quad (3).$$

4. The spacer for a liquid crystal display according to claim 3,

5 wherein a contact angle A2 of water on the spacer, measured at 25°C when the spacer is annealed at a temperature of a glass transition temperature T2 or higher of the polymer and then cooled, and a contact angle B of water on the spacer, measured at 25°C without annealing the spacer, satisfy the relationship of the following equation (4):

$$A2 - B \geq 8^\circ \quad (4).$$

5. The spacer for a liquid crystal display according to claim 1, 2, 3 or 4,

15 wherein the polymer contains a component containing an alkyl group having 10 or more carbon atoms in an amount 10% by weight or more and a component containing an alkyl group having 4 or less carbon atoms in an amount 50% by weight or more.

20 6. A method of producing a spacer for a liquid crystal display according to claims 1, 2, 3, 4 or 5, which comprises the steps of coating the surface of a base particle with a polymer, and immersing said base particle coated the surface with said polymer in a liquid medium having a SP value of 10 or higher and then drying the base particle.

30 7. The method of producing a spacer for a liquid crystal display according to claim 6,

wherein the liquid medium having a SP value of 10 or higher has a SP value of 12 to 15.

35 8. The method of producing a spacer for a liquid crystal display according to claim 6 or 7,

wherein the liquid medium having a SP value of 10 or higher contains methanol in an amount 50% by weight or more.

9. A liquid crystal display,
5 which is obtainable by using the spacer for a liquid crystal display according to any of claims 1, 2, 3, 4, 5, 6, 7 or 8.
10. A method of measuring the contact angle of water
10 on spacers for a liquid crystal display,
 wherein a water droplet is formed on the surface obtainable by arraying an abundance of spacers for a liquid crystal display without being observed projections and depressions of 50 μm or larger on the surface and the
15 contact angle of water on said surface is measured.